

XXI.— *On a Collection of Mammals from the Batu Islands, west of Sumatra.* By MARCUS W. LYON, Jun., United States National Museum.

I HAVE been asked by the authorities of the British Museum to work out and compare with the specimens obtained by Dr. Abbott a small series of mammals from the Batu Islands, which had been collected by Mr. Kannengieter and purchased by that Institution.

Dr. Abbott's specimens from the islands were described by Mr. Gerrit S. Miller, and most of the Kannengieter examples are referable to forms named by him. There is, however, among them a new species of flying-lemur.

*Sciurus ictericus*, Miller.

The adult female from Tana Massa and the adult male simply marked "Batu Islands" differ in no respects from the original series of *Sciurus ictericus*, Miller (Smithsonian Miscell. Coll. xlv. p. 12, November 6, 1903), the type of which came from Tana Bala.

*Ratufa piniensis*, Miller.

The two brown giant squirrels from Pulo Pini (or Pinie) are typical of *Ratufa piniensis*, Miller (Smithsonian Miscell. Coll. xlv. p. 8, November 6, 1903).

*Ratufa massæ*, Miller.

The pair of brown giant squirrels from Tana Massa are typical of *Ratufa massæ*, Miller (Smithsonian Miscell. Coll. xlv. p. 7, November 6, 1903).

*Ratufa palliata*, Miller.

The three specimens from Tana Massa are not quite typical, but too close to be separated satisfactorily. The hind feet (with claws 76–81 mm.) average somewhat smaller than they do in *R. palliata* (see table of measurements, Lyon, Proc. U.S. Nat. Mus. xxxii. p. 445, May 23, 1907), 80–90 mm., but have about the same size as they do in *R. lenata*, Miller (Proc. U.S. Nat. Mus. xxvi. p. 430, February 3, 1903), 72–79 mm. The skulls of the three Tana Massa specimens are a trifle shorter as to total length than skulls of similar age from Sumatra. The arrangement of the nasals and the premaxillæ is not different from that found in *Ratufa palliata*.

*Petaurista batuana*, Miller.

The three flying-squirrels, one from Pulo Pini and two from Tana Massa, I have identified as *Petaurista batuana*, Miller (Smithsonian Miscell. Coll. xlv. p. 27, November 6, 1903). There are probably two colour-phases in this species. The original series, seven from Tana Bala and one from Tana Massa, are all of a ferruginous colour, while the three Kannengieter specimens are almost seal-brown in colour, similar to specimens in the U.S. National Museum from Java. I can detect no differences between the skulls of individuals from the various islands of the Batu group. The original series was collected by Dr. W. L. Abbott in February, and they are evidently in an unworn pelage. No date appears on the Kannengieter labels, but the skins are evidently in an old pelage with a new and darker one coming in in places. The old pelage, while distinctly redder than the new, in no sense approaches the bright and ferruginous tints in Dr. Abbott's series of *Petaurista batuana*.

? *Arctogalidia inornata*, Miller.

No. 7. 6. 18. 7, a young male from Pulo Pini, probably represents a new species of *Arctogalidia*. The specimen is too young to determine definitely its characters and relations. In point of colour it is very similar to an adult female paratype of *Arctogalidia inornata*, Miller (Proc. Washington Acad. Sci. iii. p. 131, March 26, 1901), from the Natuna Islands (Bunguran), Cat. no. 104860 U.S. N. M. It differs mainly in being less tawny along the sides of neck, in having darker ears and feet, and in the possession of three stripes on the lower back. Although these stripes are absent on the adult female Natuna *Arctogalidia*, they are present on a very young specimen from the Natunas.

*Tupaia cervicalis*, Miller.

The tree-shrew from Tana Massa may be referred to *Tupaia cervicalis*, Miller (Smithsonian Miscell. Coll. xlv. p. 59, November 6, 1903), although it is not typical. The light colours of the neck are not so pronounced as in the type, nor do they extend so far back posteriorly. The sharply defined black area of the back, as well as all other points of coloration, are practically the same in the type and the Kannengieter specimen. The skulls of the two specimens are indistinguishable from each other. Were it not that a name has already been given to the tree-shrew from the Batu

Islands, I would hesitate to separate the Tana Massa specimen from *Tupaia tana*.

*Cynocephalus tellonis*, sp. n.

*Type*.—Skin and skull of adult female, no. 7. 6. 18. 2, British Museum. Kannengieter Collection, collected on Pulo Tello, Batu Islands, west coast of Sumatra.

*Diagnostic characters*.—A medium-sized flying-lemur, very similar to *Cynocephalus tuancus* (Miller) (Smithsonian Miscell. Coll. xlv. p. 53, November 6, 1903) of the Banjak Islands, north-west coast of Sumatra, but with the nasals more pinched up into a ridge on the rostrum and with the squamosal root of the zygoma deeper.

*Colour*.—The colour of the type and of a paratype, Cat. no. 7. 6. 18. 3, Brit. Mus., differs in no essential respects from that of flying-lemurs, in the grey pelage phase, from the Malay Peninsula. The skin of a male, Cat. no. 7. 6. 18. 4 Brit. Mus., is very dark and shows no essential differences in colour from a paratype, Cat. no. 114376 U.S. N. M., an adult male, of *Cynocephalus tuancus* (Miller) from the Banjak Islands. A young male, Reg. no. 7. 6. 18. 5 Brit. Mus., is almost uniformly cinnamon-rufous, very light on the underparts, darker about the fore limbs, antebrachial membrane, and head; the usual white flecks are found on the feet and legs and a few on the back.

*Skull and teeth*.—The skull and teeth of *Cynocephalus tellonis* are very similar to those of *C. tuancus*, the chief difference being that the new form has slightly larger teeth, nasals more pinched up into a ridge on top of rostrum, squamosal root of zygoma much deeper, 6–7 mm. instead of 4 mm. in *C. tuancus*. The mastoid inflation is much less in the Batu animal than in the Banjak specimen. The temporal ridges in the three Tello skulls are much more closely approximated than they are in the single adult skull from Pulo Tuangku, although the latter skull, as judged by the teeth, is the oldest. There is practically no difference in size between the skulls of the two sexes in *C. tellonis*, the two females measuring, greatest length, 70 and 69.3 mm., and the male 67 mm.

*Measurements*.—The three adults give the following measurements respectively (7. 6. 18. 2, female, type; 7. 6. 18. 3, female; and 7. 6. 18. 4, male):—Hind foot (measured from dried skin) 67, 66, 62 mm.; greatest length of skull 69.3, 70, 67; zygomatic breadth 44.5, 42.6 (!), 44.5; palatal length 32, 31.8, 32.4; width of rostrum at premaxillo-

maxillary suture 19·5, 20, 19·5; interorbital constriction 18·5, 18, 18·2; breadth of brain-case above roots of zygomata 24·6, 24·6, 24·3; mastoid breadth 29·9, 29·4, 29·8; upper tooth-row (all teeth) 34·3, 33·9, 33.

*Specimens examined*.—Four, three adults and one young, all from Pulo Tello.

*Remarks*.—The small size of *Cynocephalus tellonis* at once serves to distinguish it from its geographical ally, *C. saturatus* (Miller) (Smithsonian Miscell. Coll. xlv. p. 51, November 6, 1903), from Tana Bala and Pulo Pinie of the Batu Islands, of which it is a diminutive and lighter-coloured form. Its close resemblance to *C. tuancus* is probably fortuitous and does not indicate a phylogenetic relationship.

XXII.—Notes on North-American Longicornia, with Descriptions of some new Species. By C. J. GAHAN, M.A.

AMONG the better known of the North-American Longicornia are two species of Clytini, one of which is very injurious to the locust-tree (*Robinia pseudacacia*) and the other just as destructive to the hickory (*Carya alba* &c.). In reference to the second of these species, Packard, in his 'Forest Insects' (Fifth Report of the United States Entomological Commission, 1890), writes:—"Of the 170 species of insects which live at the expense of the hickory, the most annoying and common borer is the *Cyllene picta*, or common hickory borer." This species has, however, been wrongly identified by American entomologists as the *Leptura pictus* of Drury. It is described below as a new species under the name of *Cyllene caryæ*. For many years *Leptura pictus*, Drury, was correctly regarded as a synonym of *Leptura robiniaë*, Forst. It was only when the hickory borer was discovered to be a distinct species from the locust-tree borer (*Cyllene robiniaë*) and a separate name was required for it that it began to be known as *Cyllene picta*, Drury. How the mistake arose of giving it this name is difficult to understand, because Drury's figure and description are clearly those of the species previously described by Forster (the latter, in fact, quotes Drury's figure), and Drury distinctly states that he "received it from New York, where they are found on the locust-tree."

The synonymy of *Cyllene robiniaë*, the locust-tree borer, is as follows:—